

Amendments to the Drawings:

The attached sheet of drawing includes new Fig. 13 that illustrates a spectrometer shown generally as reference character 100 having a collimating mirror designated as reference character 105, a diffraction grating designated as reference character 106, a focusing mirror designated as reference character 107, and an order sorting filter designated as reference character 110.

Attachment: 1 Additional Sheet.

Remarks

I. Claim Status:

Claims 1-5, 7-16 and 21-23 are pending. Claims 6 and 17-20 have been canceled. Claims 1-5 and 7-9 stand rejected. Claims 21-23 are objected-to and claims 10-18 are allowed. Claim 1 and subsequent claims have been amended to address antecedent basis and grammatical issues in particular, and prior art rejections with respect to independent claims 1 and 7. Support for the amendments is found throughout the specification and claims as originally filed. Entry and consideration of claims 1-5, 7-16 and 21-23, as amended, are respectfully requested.

II. Drawing Objection:

The drawings are objected to for failing to show the collimating mirror, diffraction grating and focusing mirror recited in claim 14, the order sorting filter recited in claim 15, and the chopper, prism, and the parabolic optical-path-folding mirrors elements recited in claim 17. The requested information for claims 14 and 15 has been added via new FIG. 13 as specified above. Claim 17 has been cancelled. No new matter is added by this amendment as the description thereof is described in the specification, specifically at paragraph 58, and recited in the claims as originally filed, and more specifically, in claims 14 and 15. Entry and consideration of FIG. 13 are respectfully requested.

A replacement sheet is enclosed. Reconsideration and removal of the objections to the drawings are respectfully requested.

III. Claim objections:

Claims 21-23 are deemed to include allowable subject matter, but are objected to due to their dependency on rejected base claims. Claim 21 has been rewritten in independent form to incorporate all the limitations of the base claim (19) and any intervening claim (20), thereby rendering the objections thereto moot. Claims 22 and 23 depend from claim 21 and are allowable. Reconsideration and removal of the objections to claims 21-23 are respectfully requested.

IV. Rejections under 35 U.S.C. § 102(b):

Claims 1, 2, 5 and 6 stand rejected under § 102(b) as being anticipated by Minott et al. (5,828,797). Claim 1, as amended, includes a spectrometer with a diffraction grating and a detector array for sequentially refracting light energy and detecting specific wavelengths received from the optical viewing port. The spectrometer produces an electrical signal received and interpreted by a microprocessor. The microprocessor produces an output relative to the electrical signal to signify the presence of flame in the exhaust of a turbine engine. Minott et al. neither shows or suggests such an apparatus. The absence of these elements and combination of elements renders the application of Minott et al. as an anticipating reference of claim 1, as amended, improper. Reconsideration and removal of the rejection of claim 1 as being anticipated by Minott et al. are respectfully requested.

Claims 2 and 5 depend directly from claim 1 and are allowable for the same reasons given for claim 1. Reconsideration and removal of the rejections of claims 2 and 5 are respectfully requested.

Claim 6 has been cancelled thereby rendering the rejection thereof moot.

V. **Rejections under 35 U.S.C. § 103(a)**

Claims 3, 4, 19 and 20 are rejected under 35 U.S.C. § 103(a) as being obvious over Minott et al in view of Castleman. Claims 3 and 4 depend directly from claim 1 and are allowable for the same reasons given for claim 1 above. Castleman neither shows nor suggests the claimed features absent from Minott et al. nor the unique claimed combination. Nothing in either reference, alone or in combination, teaches or motivates one of ordinary skill in the art to combine the references to arrive at the claimed invention. Furthermore, no such teaching has been identified as is required.

For these reasons, claims 3 and 4 are allowable over Minott et al. in view of Castleman. Reconsideration and removal of the rejections of claims 3 and 4 under § 103(a) are respectfully requested.

Claims 19 and 20 have been canceled thereby rendering the rejections thereof moot.

VI. Allowable Subject Matter:

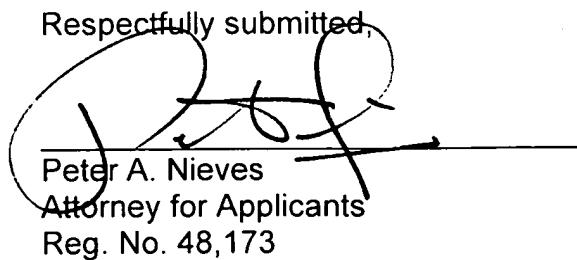
Applicants acknowledge with appreciation the finding that claims 10-18 are allowable. The amendments made to claims 10-15 and 17 were solely to address antecedent basis and grammatical issues not identified in the office action.

VII. Revocation of Power of Attorney with New Power of Attorney and Change of Correspondence Address, and a Statement Under 3.73(b):

Applicants submit herewith an executed Revocation of Power of Attorney with New Power of Attorney and Change of Correspondence Address, and the accompanying Statement Under 3.73(b).

VIII. Conclusion:

In light of the foregoing and for at least the reasons set forth above, the Applicants respectfully request favorable reconsideration and allowance of the present application and the presently pending claims. If in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (603) 627-8134.

Respectfully submitted,

Peter A. Nieves
Attorney for Applicants
Reg. No. 48,173